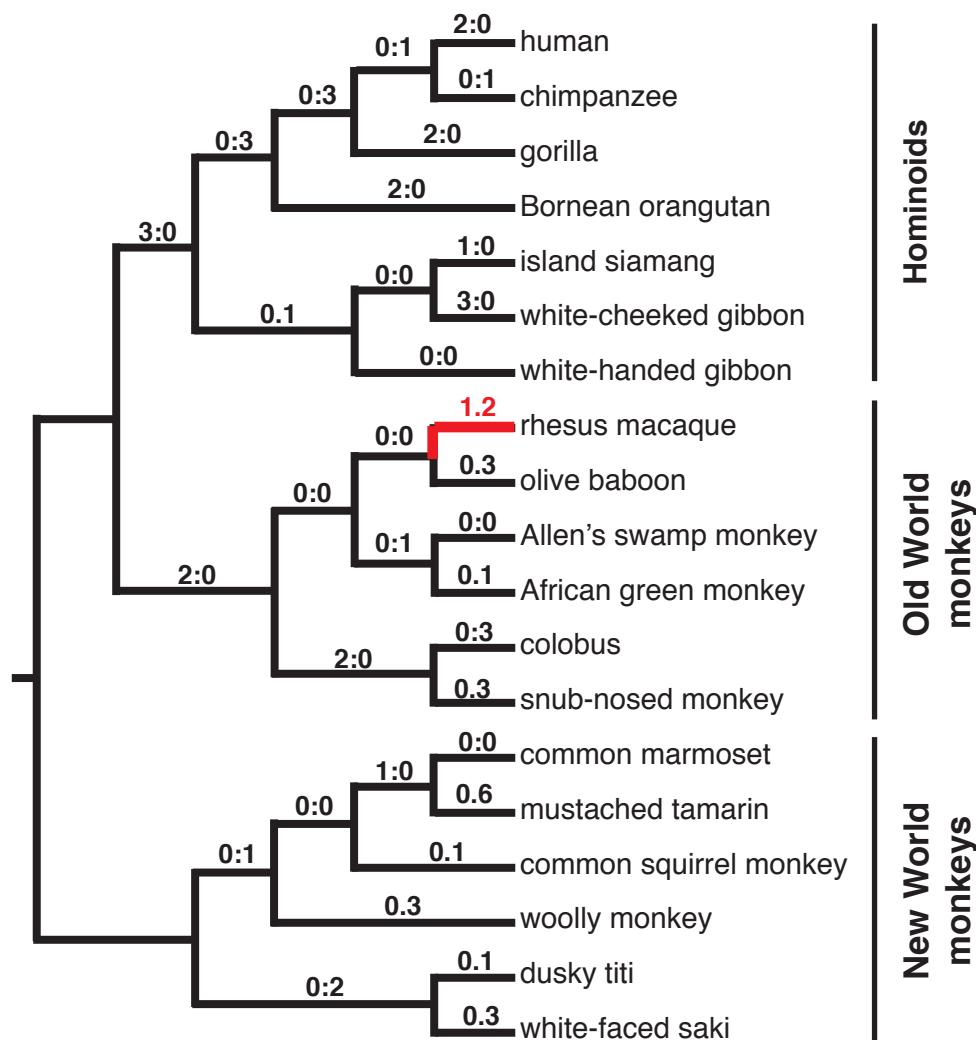


Supplementary Figure 1. Primate species used in initial screen for evidence of positive selection. Red boxes indicate species for which a gene ortholog was included for phylogenetic analysis.

IL13



Supplementary Figure 2. dN/dS ratios for IL13 orthologs in the primate lineage as calculated using PAML. dN/dS ratios greater than 1 are denoted in red.

ECP

human	MVPKLFTSQICLLLLLGLMGVE GSLHARPPQFTRAQWFAIQHISLNPPRCTIAMRAINNY
chimpanzee	MVPKLFTSQICLLLLLGLMGVE GSLHARPPQFTRAQWFAIQHISLNPPRCTIAMRVINNY
bonobo	MVPKLFTSQICLLLLLGLSGVCGSLHAKPROFTRAQWFAIQHVS LNPPOCATAMRVINNY
gorilla	MVPKLFTSQICLLLLLGLMGVE GSLHARPPQFTRAQWFAIQHISLNPPRCTIAMRVINNY
orangutan	MVPKLFTSQICLLLLLGLSGVCGSLHAKPROFTRAQWFAIQHVS LNPPOCATAMRVINNY *****
human	RWRCKNQNTFLRTTFANVVNVCGNQSIRC PHNRTLNNCHR SRFRVPLLHCDL INPGAQNI
chimpanzee	RWRCKNQNTFLRTTFANVVNVCGNQSIRC PHNRTLNNCHOSRFRVPLLHCDL INPGAQNI
bonobo	ORRCKDONTFLRTTFANVVNVCGNPNITCPRNRTLHNCHR SRFOVPLLHCNLINPGAQNI
gorilla	RWRCKNQNTFLRTTFANVVNVCGNQSIRC PHNRTLNNCHR SRFRVPLLHCDL INPGAQNI
orangutan	ORRCKDONTFLRTTFANVVNVCGNPNITCP SNRSRNNCHHSGVQVPFIYCNLTTPSPQNI *****
human	SNCTYADRPGR RFYVVACDN RDPRDSP RYPV VPVHLD TTI
chimpanzee	SNCRYADRPGR RFYVVACDN RDPRDSP RYPV VPVHLD TTI
bonobo	SNCKYADRTERRFYVVACDN RDPRDSP RYPV VPVHLD TTI
gorilla	SNCRYADRPGR RFYVVACDN RDPODS PRYPV VPVHLD TTI
orangutan	SNCSYANTGRRFYIVACDN RDPRDSP RYPV VPVHLD TTI ***

Supplementary Figure 3. Amino acid alignment of great ape ECP homologs. Divergent sites relative to human ECP are highlighted.